

□ Regeneration for reverse-osmosis membranes

L20 ANSWER 51 OF 121 HCA COPYRIGHT 2002 ACS
AN 85:166227 HCA
IN Tsukamoto, Kiyoshi
PA Ebara-Infilco Co., Ltd., Japan
SO Japan. Kokai, 5 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 51071880	A2	19760622	JP 1974-145988	19741219
	JP 55037283	B4	19800926		

AB An inorg. or org. compd. contg. soln. is fed into the solute side of a spent membrane and pressurized to transfer the solvent through the membrane. Then a gas or liq. is passed through the unit, and the membrane is treated with enzymatic agent (A) and complexing agent (B) or chelating agent (C). Optionally, A follows B and/or C. The regeneration is achieved simply and efficiently. Thus, a membrane, used 500 hr, was flushed with deionized water, a soln. (pH 3.5) contg. (B) EDTA [60-00-4] 0.4 and citric acid [77-92-9] 0.2% was circulated in the cell at 0.6 kg/cm², then N was replaced with deionized water, and this processes were repeated 3 times. An air-B mixt. was circulated in the cell at 0.4-0.5 kg/cm² for .apprx.15 sec, then the pressure was reduced to 0 kg/cm². This process was repeated 10 times. After treatment, the membrane had 97% of its original permeability to tap water.